

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/YTL/LST-38/NGP

Mine code : 38MSH26002

- (i) Name of the Inspecting : **M017**) **ASHISH MISHRA**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 22/11/2018
- (v) Prev.inspection date : 21/12/2009

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GAURALA**
- (b) **Registration NO.** : **IBM/5319/2011**
- (c) **Category** : **B Manual**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **MAHARASHTRA**
- District : **YEOTMAL**
- Village : **GAURALA**
- Taluka : **MAREGAON ROAD**
- Post office : **MAREGAON ROAD**
- Pin Code : **445303**
- FAX No. : **0712 : 234239**
- E-mail :
- Phone : **(0712) : 232775 (M. D.), 2:**
- (f) **Police Station** :
- (g) **First opening date** : **15/11/1976**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **3RD FLOOR, UDYOG BHAVAN,**
correspondance **CIVIL LINES,**
NAGPUR-440 001
3. (a) **Lease Number** : **MSH0024**
- (b) **Lease area** : **116.13**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **11/12/2024**
4. **Mineral worked** : **DOLOMITE** **Associated**
LIMESTONE **Main**

5. Name and Address of the

Lessee : M/s Maharashtra State Mining Corporation
 5, Abhyankar Nagar Nagpur -
 10 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Owner : M/S MAHARASHTRA STATE MINING CORPORATION LTD.
 5, ABHYANKAR NAGAR NAGPUR -
 10 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Agent : SHRI P.P. SONI
 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Mining Engineer
 Name : SHRI S.P. KARANJAWALA, Full Time
 Qualification : DIPLOMA IN MINING AND MINE SURVEYING IIN
 Appointment/ : 28/05/2004
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	01/01/2003
Plan/Scheme of Mining		FMCP under 23C(1)	04/06/2010
		Renewal under rule 24 MCR1960	04/08/2010
		Mining Scheme rule 12 MCDR1988	08/04/2015
		MP modif under 17(3) MCR 2016	02/07/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	69 Boreholes were proposed to be drilled in the last approved SOM, approved on 08.04.2015, for a period of 2014-15 to 2018-19. No exploration carried out till 2017-18. Further, as per approved Modified Mining Plan for 2018-19, approved on 02/07/2018, 69 boreholes were proposed to be drilled in the year 2018-19.	Nil	Mine is closed since 2012-13 for want of EC.
1b	Exploration over lease area for geological axis 1 or 2	G-1 and G-2 based on the exploration carried out till date.	G-1 and G-2 reported in the last approved Modified MP.	Total 73 core bore holes were drilled in the area during 1973-77 period by DGM, Maharashtra over 100m X 75m grid with approximately 2157 m drilling meterage and reserves are estimated based on the exploration data for that exploration only.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	69 Bore holes were proposed to be drilled by lessee himself.	Nil	These boreholes are again proposed to be drilled in the year 2018-19.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Northern part and Western part of the lease area are unexplored. Exploration is mainly proposed in that area.	Nil	

1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2018 as per the approved Modified MP are: 111- 13610471 T 222- 429471 T Total- 14039942 T (For Limestone only)	
1f	General remarks of inspecting officers on geology, exploration etc	Originally granted area was 203.85 ha out of which part area has been surrendered and remaining area 116.13 ha has been renewed by the State Govt. But no executed lease deed is available for the area.	Exploration since execution of original lease (203.85 ha) has not been carried out by the lessee. Area in North and West part of the lease are still unexplored. Also, a canal, 2 HT/LT Electric Lines, Two Public roads are passing through or in the vicinity of the lease area but they have not been taken into account. Therefore, Geology, Exploration and Reserves estimation aspects are required to be dealt with care.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Pit-1, at N 400 to N 700 and E 1600 to E 1850 (local grid) approximately as per the proposals given in the approved SOM which was modified to N 2223700 to N2223900 and E275300 to E275500 in the approved Modified Mining Plan spread over Pit-1 and 2.	Nil, as mine is not working since 2012-13. The area has total 4 main pits out of which three pits namely Pit-1, 2 and 4 are located in the northern block at N 350 to N 800 and E 1600 to E 1850 and one pit, Pit-3 is in the southern block at N 600 to N 800 and E 600 to E 800 (local grid). Proposals were for northern pit only which could not be met for want of EC.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, top soil is not available in the area. Separate benches shall be made in the ore and overburden. General RL is 252 m and two benches are proposed for working, 240-246 mRL and 246-252 mRL. Top bench shall be for overburden removal and shall be kept well in advance to avoid any mixing with ore. Further sub-benches shall be made as per the thickness of overburden and orebody.	Nil. Earlier working was in form of Manual working, hence presently, 3 benches of approximately 3-4 m each are there in Pit 1, 2 and 4 and 2 benches are there in Pit-3. Top bench of 3-4 m is having overburden and below this, ore benches were being worked. Maximim depth observed at the site is approximately 11-12 m from the surface in pit 1.	
2c	Stripping ratio or ore to OB ratio	2017-18: 1:0.19	Nil	
2d	Quantity of topsoil generation in m3	Nil	Nil	No top soil is available in the area.

2e Quantity of overburden generation in m3 2017-18: 736 cum 2017-18: Nil

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc

As per the observations in the field, there are 5 pits developed in the area (Pit 5 extended in the contiguous area of 3.62 ha where mining lease is also held by M/s MSMC Ltd.) over a total of 5.5205 ha area approximately. 4 pits are in northern part of the lease area and one pit is in southern part. As the deposit is almost flat with 5 to 15 deg dip, the pits are not systematic and dumps are kept alongside the pits. Therefore, systematic development has not been done in the area.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	Initially One Pit i.e., Pit-1 at location N 400 to N 700 and E 1600 to E 1850 (local grid) as per approved SOM which was modified to N 2223700 to N2223900 and E275300 to E275500 in the approved Modified Mining Plan spread over Pit-1 and 2.	Nil
3b	Quantity of ROM mineral production proposed	2017-18: 77983 T (Limestone)	Nil
3c	Recovery of sailable/usable mineral from ROM production	90% of ROM is proposed as saleable Limestone (2017-18: 70184 T)	Nil
3d	Quantity of mineral reject generation	Total Mineral rejects proposed are 10% of the ROM (2017-18: 7798 T)	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No specific proposal regarding grade apart from size rejects i.e., -25mm to +10 mm	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil
3g	Grade of sub grade mineral generation	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual Sorting	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals	Nil	Mineral rejects are proposed for blending on the basis of requirements.
3j	Provision of drilling and blasting in mineral benches	Yes, drilling is proposed through Jack Hammer and Wagon Drills (84 mm dia). Further, Drilling and blasting are proposed to be done through a Govt. registered contractor.	Nil	
3k	Provision of mining machineries in mineral benches	Yes, apart from drilling and blasting, loader, tractor trolley and dumpers with 16 T capacity are proposed to be deployed.	Nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Benches with 6 m height are proposed.	Nil	Proposals are made under Category A. Hence bench height proposed or kept at the mine is suitable for method of working.
3m	Total area covered under excavation/pits	Area under excavation (upto 2018-19): 6.5655 ha	Area under excavation: 5.5205 ha	No change in existing area as mine is not working since long.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.19	Nil	

3o	Total area put in use under different heads at the end of year	Area under: Excavation- 5.5205 ha Overburden/Waste Dumps- 2.9568 ha Infrastructure- 0.2238 ha Roads- 1.1397 ha Others, (i) Plantation- 0.2926 ha (ii) Mineral rejects Stack- 0.2679 ha Total- 10.4013 ha	No change in existing area as mine is not working since long.
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 84991 T 2015-16: 99165 T 2014-15: 115773 T 2013-14: 67250 T Limestone, 5555 T Dolomite 2012-13: 67250 T Limestone, 5555 T Dolomite	2016-17: Nil 2015-16: Nil 2014-15: Nil 2013-14: Nil 2012-13: Nil
3q	General remarks of inspecting officers on method of mining etc.		No comments as the mine is not working since long and is recommended for determination to the State Govt.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Nil	
4b	Location of topsoil, OB and mineral reject dumps	All dumps are located alongside the five pits available in the lease area.	As per the information mentioned in the proposals.	For systematic development of the deposit, these scattered dumps need to be shifted away from pits preferably over non-mineralized land, if any.
4c	Number of dumps within lease area and outside of lease area	All dumps are within the lease area	All dumps are within lease area.	There are 14 small dumps scattered besides the pits. All are within the lease area.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All dumps within pit limits.	As above.	
4e	Number of active and alive dumps.	All 16 dumps are active.	All dumps are active.	No dump can be considered as dead as all are required to be shifted away from the pits.
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Not applicable	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No	No	
4i	Length of Retaining wall or garland drain all along dumps	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			Waste dumps need to be re-handled for systematic development of the deposit.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No such proposals for backfilling.	Nil	
5b	Area under backfilling of mined out area	No such proposals	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposals	Nil	

5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling is proposed or can be done as amount of waste to be generated upto the conceptual stage shall be very less in comparison to the excavation. At conceptual stage, conversion of area into a water reservoir upon exhaustion of mineral is proposed.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes, as per the provisions of Rule 26(2), the report is to be submitted before 1st July of every year for the works carried out under PMCP during preceeding year.	No	The mine is not working since long and is recommended for determination to the State Govt.
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	Approximately 2 ha	0.2926 ha till date	
6d	No. of saplings planted during the year	50 saplings	Nil	
6e	Cumulative no .of plants	Data not available	250 plants approximately	
6f	Any other method of rehabilitation	No such proposals	Nil	

6g	Cost incurred on watch and care during the year	Rs 1,70,000/-	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	No such proposals	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposals	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No such proposals	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposals	Nil	It is proposed to convert mined out area into water reservoir at conceptual stage.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposals	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Within 7.5 m non-mining zone	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No such proposals	Nil	

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Ambient air and water monitoring is proposed with an expenditure of Rs 1,50,000/-	Nil	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No comments as the mine is not working since long and is recommended for determination to the State Govt.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting and dispatch.	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sortng	Nil	
7c	Different grade of mineral sorted out at mines.	SMS Grade, Cement Grade and BF grade	Nil	As per Annual returns filed for 2017-18, old stock of 66.2 T for SMS grade Limestone is reported in opening and closing stocks.
7d	Any beneficiation process at mines .	No such proposals	Nil	One Lime Kiln is available within the Mining Lease area for use of Limestone.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No comments as the mine is not working since long and is recommended for determination to the State Govt.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and stacking was proposed.	Nil	
8b	Concurrent use or storage of topsoil	Storage of top soil was proposed.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Separate dumps for Overburden/Waste and MIneral rejects are available at the mine.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Furnished in the Mining Plan.	Furnished in the Mining Plan.	
8g	Survival rate		No records available.	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling in the area proposed for working shall be done by a Water Tanker having 10000 L capacity	Nil	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Apart from normal degradation due to mining operations in the past, no specific issues pertaining to environment degradation was observed.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual Returns: To be submitted before 1st July each year for the preceeding financial year Monthly Returns: To be submitted before the 10th day of every month in respect of the preceeding month	Annual Returns submitted online upto 2017-18 Monthly Returns submitted online upto Dec'18	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Nil information furnished	As the mine is not working, statutory persons shall be deployed upon re-opening of the mine.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under opencast Workings: 5.521 ha Waste Disposal: 2.957 ha Infrastructure & roads: 1.467 ha Others: 0.56 ha	Information furnished is in consonance with that given in the Approved Mining Plan document.	
9d	Scrutiny of Annual return on afforestation	Nil	Correct as no plantation has been carried out during the year.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Correct information as mine is not under any operations.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Nil stocks and production Graded Ore: SMS Grade-Opening and Closing Stocks : 66.20 T, production and Dispatch: Nil	Correct information as mine is not under any operations. Old mineral stock is also reported in the returns.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: Nil Ex-mine Price: Nil Production Cost: Nil	For Ex-mine price, it was suggested to furnish information as per Rule 45 (8)(IV) of MCDR'2017.
9h	Scrutiny of Annual return on fixed assets	Nil information furnished. Further, depreciation for industrial plants/buildings have been given.	Information furnished as per Rule 45(11) of MCDR'2017.
9k	Scrutiny of Annual return on mining machineries	Nil	Correct information furnished as mine is not under any operations.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed		Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :**(ASHISH MISHRA)**

Indian Bureau of Mines